

Appl. No. 09/588,929
Amdt. dated May 26, 2004
Reply to Office Action of March 26, 2004

AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions, and listings, of claims:

1 1. (Previously Presented) A method for use in a communications network
2 having network elements for performing telephony services, comprising:
3 providing an interface to the network elements;
4 receiving requests, by the interface, from a software module specifying
5 performance of telephony services; and
6 sending, in response to requests of the module, commands over a packet-
7 based network to one or more network elements involved in performing the telephony
8 services.

1 2. (Original) The method of claim 1, wherein providing the interface
2 comprises providing representations of the network elements, the method further
3 comprising accessing the representations to generate the commands to the one or more
4 network elements.

1 3. (Original) The method of claim 1, wherein receiving requests from the
2 software module comprises receiving requests from script modules.

1 4. (Original) The method of claim 3, wherein providing the interface
2 comprises providing a script engine.

1 5. (Original) The method of claim 3, wherein providing the interface
2 comprises providing a script engine and an application programming interface.

1 6. (Original) The method of claim 1, wherein providing the interface
2 comprises providing a Simple Object Access Protocol component.

1 7. (Original) The method of claim 1, wherein providing the interface
2 comprises providing a Common Object Request Broker Architecture component.

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1 8. (Original) The method of claim 1, further comprising representing the
2 software module as a state machine having a plurality of states each representing an
3 action corresponding to a telephony service.

1 9. (Original) The method of claim 1, further comprising the software module
2 receiving user input from which is generated the requests.

1 10. (Original) The method of claim 1, wherein sending the commands
2 comprises sending the commands to one or more network elements selected from the
3 group consisting of an integrated voice response system, a DTMF decoder, a voice mail
4 system, and a recording system.

1 11. (Previously Presented) An apparatus for providing telephony services in a
2 communications network having network elements comprising:
3 a software module containing instructions specifying performance of
4 telephony services in the communications network; and
5 an interface layer comprising one or more components responsive to
6 execution of the software module to provide commands over a packet-based network to
7 corresponding network elements to perform the telephony services specified by the
8 software module.

1 12. (Original) The apparatus of claim 11, wherein the interface layer
2 comprises representations of the network elements.

1 13. (Original) The apparatus of claim 11, wherein the interface layer
2 comprises a communications component to send the commands to the network elements.

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1 14. (Original) The apparatus of claim 13, wherein the communications
2 component comprises an Object Request Broker.

1 15. (Original) The apparatus of claim 13, wherein the communications
2 component comprises an application programming interface.

1 16. (Previously Presented) The apparatus of claim 13, wherein the commands
2 include Session Initiation Protocol messages.

1 17. (Original) The apparatus of claim 11, wherein the software module
2 comprises a script.

1 18. (Original) The apparatus of claim 17, wherein the interface layer
2 comprises a script engine.

1 19. (Original) The apparatus of claim 11, wherein the software module
2 comprises a Java object.

1 20. (Original) The apparatus of claim 11, wherein the interface layer
2 comprises a Simple Object Access Protocol component.

1 21. (Original) The apparatus of claim 11, wherein the interface layer
2 comprises a Common Object Request Broker Architecture component.

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1 22. (Previously Presented) A system for use in a telephony network having
2 network elements capable of performing various telephony services, comprising:
3 means for storing representations of telephony services;
4 means for communicating with the network elements; and
5 means for executing the storing means to specify performance of a
6 telephony service, the communicating means providing, in response to execution of the
7 storing means, commands over a packet-based network to the one or more network
8 elements involved in performing the telephony service.

1 23.-25. (Cancelled)

1 24. (Previously Presented) An article including one or more machine-readable
2 storage media containing instructions for providing telephony services in a
3 communications network, the instructions when executed causing a controller to:
4 receive requests from a telephony service software module specifying
5 plural telephony tasks; and
6 send commands over a packet-based network to one or more network
7 elements in the communications network in response to the requests to perform the
8 specified telephony tasks.

1 25. (Original) The article of claim 24, wherein the instructions when executed
2 cause the controller to send commands according to a Command Object Request Broker
3 Architecture protocol.

1 26. (Original) The article of claim 24, wherein the instructions when executed
2 cause the controller to perform one or more of the tasks selected from the group
3 consisting of play recording, receive dual tone multi-frequency signals, receive voice
4 data, access voice mail, and forward a call.

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1 27. (Previously Presented) A data signal embodied in a carrier wave
2 comprising instructions that when executed cause a system to:
3 receive requests specifying telephony services from a software module;
4 and
5 generate commands over a packet-based network to network elements in
6 response to the request to perform the telephony services.

1 28. (Previously Presented) The method of claim 1, wherein sending the
2 commands comprises sending Session Initiation Protocol (SIP) messages.

1 29. (Previously Presented) The method of claim 1, wherein sending the
2 commands over the packet-based network comprises sending the commands over an
3 Internet Protocol (IP) network.

1 30. (Previously Presented) The method of claim 1, wherein receiving requests
2 specifying performance of telephony services comprises receiving requests specifying
3 performance of telephony services over the packet-based network.

1 31. (Previously Presented) The apparatus of claim 12, wherein the
2 representations of the network elements comprise representations of one or more of the
3 following network elements: an integrated voice response system, a DTMF decoder, a
4 voice mail system, and a recording system.

1 32. (Previously Presented) The apparatus of claim 11, wherein the packet-
2 based network comprises an Internet Protocol (IP) network.

1 33. (Previously Presented) The apparatus of claim 11, wherein the software
2 module contains instructions specifying performance of telephony services over the
3 packet-based network.

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1 34. (Previously Presented) The apparatus of claim 32, wherein the software
2 module contains instructions specifying performance of telephony services over the
3 Internet Protocol (IP) network.

1 35. (Previously Presented) The system of claim 22, wherein the packet-based
2 network comprises an Internet Protocol (IP) network, and the storing means stores
3 representations of telephony services over the IP network.

1 36. (Previously Presented) The article of claim 24, wherein sending
2 commands over the packet-based network comprises sending commands over an Internet
3 Protocol (IP) network.

1 37. (Previously Presented) The article of claim 36, wherein receiving requests
2 from the telephony service software module specifying plural telephony tasks comprises
3 receiving requests from the telephony service software module specifying plural
4 telephony tasks over the IP network.

1 38. (Previously Presented) The article of claim 24, wherein sending the
2 commands comprises sending the commands to one or more of the following network
3 elements: an integrated voice response system, a DTMF decoder, a voice mail system,
4 and a recording system.